



VALVULAR HEART DISEASE

FACTORS AFFECTING MANAGEMENT DECISIONS IN SEVERE AORTIC STENOSIS PATIENTS WITH CLASS I INDICATIONS FOR AORTIC VALVE REPLACEMENT

ACC Oral Contributions

Georgia World Congress Center, Room B408

Sunday, March 14, 2010, 2:15 p.m.-2:30 p.m.

Session Title: Hot Topics: Aortic Valve

Abstract Category: Adult Cardiothoracic Surgery/Valvular Surgery

Presentation Number: 0901-04

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Background: Aortic stenosis (AS) is common and most frequent cause of aortic valve replacement (AVR). There is a large nonsurgical rate despite a dismal natural history in severe AS patients. We analyzed the decision making process that follows the diagnosis of severe AS with class I indications for AVR to identify the barriers to AVR.

Methods: We evaluated 187 consecutive patients with severe AS from our echocardiographic laboratory. Severe AS was defined as aortic valve area (AVA) <1.0 cm². Detailed reviews were performed for symptoms, actions by the referring physicians, cardiologists and cardiac surgeons. Sources and reasons for nonsurgical management were analyzed.

Results: Of the 187 patients, 105 were men. The mean age was 74 ± 14 years, 39% diabetics, 57% had heart failure, and 54% had CAD. The AVA was 0.72 ± 0.18 cm² and EF $54 \pm 21\%$. One hundred and forty-seven (79%) patients had exertional symptoms referable to AS (chest pain 40%, dyspnea 75%, dizziness or syncope 12%). Additional 13 patients had LVEF <0.50 . Hence, class I indication for AVR was present in 160 (86%) patients. Another 14 (7%) had high filling pressures on echo. Of these 128 (70%) were referred for AVR which was performed in 95 (51%) patients. The reasons for nonsurgical management were patient refusal in 39 (42%) and comorbidities (dementia, chronic kidney disease, porcelain aorta) in 23 (25%). In 22 patients (25%), AS was thought not to be severe despite being severe by ACC/AHA guidelines. The predominant players in nonsurgical decision were patient or family (42%), the cardiologist (36%) and the surgeon (17%). Lack of AVR correlated with greater age (77 ± 14 vs 70 ± 13 years, $p=0.002$), lack of symptoms due to AS (40 vs 4%, $p<0.0001$), larger AVA (0.77 ± 0.18 vs 0.69 ± 0.18 cm², $p=0.02$) and higher Euroscore (21 vs 15%, $p=0.03$).

Conclusions: 1) Class I indications for AVR are present in most of the patients with severe AS and may be under-recognized. 2) Nonsurgical rate in severe AS is very high. 3) Patient reluctance is the major factor leading to nonsurgical management and this may originate from a fear of high morbidity and mortality. 4) Despite severe AS with class I indication for AVR, there seems to be reluctance to offer AVR on part of the physicians as well.